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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,272	02/24/2004	Ulrich Wantig	71281	3886
23872	7590	08/29/2005		
MCGLEW & TUTTLE, PC P.O. BOX 9227 SCARBOROUGH STATION SCARBOROUGH, NY 10510-9227			EXAMINER FINEMAN, LEE A	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,272

Applicant(s)

WANTIG ET AL.



Examiner

Lee Fineman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/24/04 & 8/25/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, wherein the compact units are provided on the inner side of the snorkel tube (claim 4) and a third compact unit (claims 14-17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: On page 8, line 5, “optronics unit 12” should be --optronics unit 13--.

Appropriate correction is required.

Claim Objections

3. Claims 1-20 are objected to because of the following informalities:

Regarding claims 1 and 20, the claims are objected to because they include items (e.g. “(travel at periscope depth)”) enclosed within parentheses that are not reference characters corresponding to elements recited in the detailed description of the drawings. Using parentheses within the claims for items other than drawing reference characters should be avoided so as to avoid confusion. The examiner suggests --during snorkeling travel at periscope depth--.

Further regarding claim 1, “the optical observation means” lacks antecedent basis.

The dependent claims inherit the deficiencies of the claims from which they depend.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-2, 4-6, 8, 14-15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambs, US 6,002,648 in view of Pratt, US 4,848,886.

Regarding claims 1, 5 and 14, Ambs discloses in figs. 1 and 4 a snorkel device (16) for a submarine (10), wherein the snorkel device comprises: an extendible and retractable snorkel tube (16, column 4, lines 12-13) and two compact units (44 and 46) in which one comprises at least one communications means (44) and the other includes an information means (46) including one of a GPS unit and a ESM unit (column 4, lines 10-12), and wherein these compact units are provided on the extendible and retractable snorkel tube (figs. 1 and 4) for above-water use during snorkeling travel at periscope depth (figs. 1 and 4) of the submarine. Ambs discloses the claimed invention except for an optical means connected to the snorkel tube, wherein the optical means is formed as a compact unit that comprises an optronics unit; and all of the compact units including short-travel drives, which are hydraulic cylinder drives. Pratt teaches a snorkel device (1) for a submarine (3) including an optical means (39, see fig. 2) connected to the snorkel tube (16), wherein the optical means is formed as a compact unit (fig. 2) that comprises an optronics unit (in 39, column 3, lines 17-20) and a short-travel drive (10-14) which is a hydraulic cylinder drive (column 3, lines 22-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the optical means compact unit of Pratt to the snorkel device of Ambs to provide various observation when the submarine is submerged close below the water line (Pratt, column 1, lines 7-10). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add short travel drives of Pratt to the other compact units of Ambs for lowering to provide better hydrodynamics when the units are not needed.

Regarding claims 2, 4, 6, 8, 15 and 17, Ambs further disclose wherein the compact units are provided on the inner side of the snorkel tube (figs. 1 and 4); the snorkel tube itself being at least partly designed in a streamlined manner (fig. 1).

Regarding claim 20, Ambs discloses in figs. 1 and 4 a snorkel device (16) for a submarine (10), the device comprising: a movable snorkel tube (16, column 4, lines 12-13) movably connected to the submarine (figs 1 and 4) and movable away from the submarine (column 4, lines 12-13); and a communication arrangement (44) connected to said snorkel tube, said communication arrangement including an communications unit (44) for above-water communication during snorkeling travel at periscope depth of the submarine. Ambs discloses the claimed invention except for an optical device connected to said snorkel tube, said optical device including an optronics short-travel drive connected to said snorkel tube and an optronics unit for above-water observation during snorkeling travel at periscope depth of the submarine, said optronics short-travel drive moving said optronics unit relative to said snorkel tube to a position with said optronics unit arranged beyond an end of said snorkel tube; and a communications short-travel drive connected to said snorkel tube, said communications short-travel drive moving said communications unit relative to said snorkel tube to a position with said communications unit arranged beyond said end of said snorkel tube. Pratt teaches a snorkel device (1) for a submarine (3) including an optical device (39, see fig. 2) connected to the snorkel tube (16), said optical device including an optronics short-travel drive (10-14) connected to said snorkel tube (16) and an optronics unit (in 39, column 3, lines 17-20) for above-water observation during snorkeling travel at periscope depth of the submarine (Pratt, column 1, lines 7-10), said optronics short-travel drive moving said optronics unit relative to said snorkel tube to a position with said

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optronics unit arranged beyond an end of said snorkel tube(column 3, lines 22-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the optronics unit of Pratt to the snorkel device of Ambs to provide various observation when the submarine is submerged close below the water line (Pratt, column 1, lines 7-10). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a short travel drive of Pratt to the communication unit of Ambs for lowering to provide better hydrodynamics when the unit is not needed. Therefore, said communications short-travel drive will move said communications unit relative to said snorkel tube to a position with said communications unit arranged beyond said end of said snorkel tube.

6. Claims 3, 7, 9-13, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambs in view of Pratt as applied to claims 1, 2, 4, 5 and 17 above, and further in view of Wöntig et al., DE 3637618 A1.

Regarding claims 3 and 7, Ambs in view of Pratt as applied to claim 2, discloses the claimed invention except for wherein the compact units are provided on the outside of the snorkel tube; a common, streamlined casing is arranged around the snorkel tube and the compact units. Wöntig et al. teach in figs. 1-4, a compact unit (antenna) provided on the outside of the snorkel tube (abstract); a common, streamlined casing (1) is arranged around the snorkel tube and the compact units. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the units of Ambs in view of Pratt on the outside of the snorkel tube in a streamlined casing as suggested by Wöntig et al. to provide more room for electronic cables, etc.

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Regarding claims 9-13, 16 and 18-19, Ambs in view of Pratt as applied to claims 1, 2, 4, 5 and 17 above and Ambs in view of Pratt and Wöntig et al. as applied to claims 3 and 7 above disclose the claimed invention except for explicitly stating wherein the communication means includes a radio unit for HF, VHF, UHF or UHF-satcom radio communication or a combination thereof. Wöntig et al. further teach use of a UHF or VHF radio (Derwent abstract USE/ADVANTAGE). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the communication unit be a radio unit for UHF or VHF as suggested by Wöntig et al. as it is a reliable, commonly available radio unit.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barthelat et al., US 4,447,129 and Ortelli, US 5,634,424 disclose periscope systems with multiple units and Wöntig et al. EP 1162137 A2 disclose a periscope system with a short travel drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF
August 25, 2005



MARK A. ROBINSON
PRIMARY EXAMINER